



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

June 17, 2011

Via Email

Gregory S. Irving  
Vice President and Controller  
W.W. Grainger, Inc.  
100 Grainger Parkway  
Lake Forest, Illinois 60045-5201

**Re: W.W. Grainger, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2010**  
**Filed February 28, 2011**  
**Definitive Proxy Statement on Schedule 14A**  
**Filed March 18, 2011**  
**File No. 001-05684**

Dear Mr. Irving:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Christopher F. Chase for

H. Christopher Owings  
Assistant Director